

REMARKS

Reconsideration of the present application is respectfully requested. Claims 1, 13, 25 and 35 have been amended. No new matter has been added.

Claims 1-3, 6, 10-16, 19, 24-27, 30, 34-37, 40 and 44 stand rejected under 35 U.S.C. § 102(e) based on U.S. Patent no. 6,463,508 of Wolf et al. ("Wolf"). Claims 4, 7-9, 17, 21, 28, 29, 31-33, 38, 39, and 41-43 stand rejected under 35 U.S.C. § 103(a) based on Wolf in view of U.S. Patent no. 6,272,598 of Arlitt et al. ("Arlitt"). Claims 5, 18, 20, 22 and 23 stand rejected under 35 U.S.C. § 103(a) based on Wolf and Arlitt in view of U.S. Patent no. 6,205,481 of Heddaya et al. ("Heddaya").

Applicants respectfully traverse the rejections. The amendments to the claims are made only to make more clear what was already recited in the claims.

The present invention relates to a technique for streaming a software application, in particular, by using one or more intermediate servers to perform certain caching and predictive streaming operations. For example, claim 1 recites:

1. (Currently amended) A system for streaming **a software application** to a plurality of clients, the system comprising:
 a **principal** server having the software application stored thereon as a plurality of blocks **and comprising a principal predictive streaming application configured to predict blocks of the software application** which will be required by devices connected to the principal server, and a principal streaming communication manager configured to transmit predicted blocks **of the software application** to designated devices connected to the principal server and service requests for **blocks of the software application** issued from downstream devices;
 at least one intermediate server connected between the principal server and the plurality of clients, each intermediate server connected to at least one upstream device and at least one downstream device and

comprising a cache, a respective intermediate predictive streaming application configured to predict blocks **of the software application** which will be required by connected downstream devices, and a respective intermediate streaming communication manager;

each respective intermediate streaming communication manager configured to (a) transmit predicted blocks **of the software application** to designated downstream devices, (b) service requests for **blocks of the software application** issued from downstream devices, (c) cache blocks **of the software application** received from connected upstream devices, and (d) issue requests for a particular **block of the software application** to an upstream device when the particular block is needed for transmission to a downstream device and is not present in the cache;

wherein each of said devices connected to the principal server comprises one of an intermediate server and a client.

Wolf does not disclose or suggest such a method. First, Wolf relates to a method and apparatus for caching media streams, such video streams or audio streams. See, e.g., Wolf's title and col. 2, lines 26-28. In contrast with the present invention, Wolf does not relate to, and therefore does not disclose or suggest, streaming a software application. Therefore, the present invention is not anticipated by Wolf.

Moreover, it would not be obvious to attempt to modify the cited art in an attempt to allow streaming of a software application. Software applications are significantly different from mere media (such as audio or video) for purpose of streaming. The order in which data in a media stream is used by the target system is inherently sequential. In contrast, with a software application, which by definition includes executable code, the order in which code in the software application is executed on a target system is not inherently sequential.

Second, Wolf also does not disclose or suggest a principal server which has the software application stored thereon as a plurality of blocks and which comprises a principal predictive streaming application configured to predict blocks of the software application which will be required by devices connected to the principal server. The

Examiner cites Wolf at col. 1, line 8 – col. 2, line 56 (specifically quoting col. 1, lines 47 – 67) as disclosing this feature (Office Action, p. 4). The Examiner must read all of the limitations in a claim together, considering the relationships between all of the claim elements. The text cited by the Examiner is in Wolf’s “Background of the Invention” and discloses that a server can determine and send the pages predicted to be requested next to a requesting computer without a specific request by the user. However, (assuming *arguendo* that text discloses a predictive streaming application) that section of text does not disclose an intermediate server being used in conjunction with that technique, in contrast with Applicants’ claims. (Note also that mere caching by a proxy, per col. 2, lines 12-20, does not represent a principal predictive streaming application configured to predict blocks of a software application which will be required by devices connected to the principal server.)

Elsewhere in Wolf there is disclosed the use of a proxy with additional functionality (i.e., “Detailed Description”, col. 3, line 18 – col. 8, line 64). However, in that disclosure Wolf does not disclose or suggest that the principal server may include a principal predictive streaming application configured to predict blocks of the software application which will be required by devices connected to the principal server.

The Examiner cannot merely take pieces of unrelated disclosure from different parts of a reference (i.e., from the “Background” and “Detailed Description” of Wolf) and attempt to read them collectively on Applicants’ claims while ignoring the relationships between the claim limitations. The Examiner must read all of the limitations in a claim together. As such, Wolf simply does not disclose or suggest a principal server which has the software application stored thereon as a plurality of blocks and which comprises

a principal predictive streaming application configured to predict blocks of the software application which will be required by devices connected to the principal server. Wolf certainly does not suggest this in context of the other features recited in claim 1.

For the foregoing reasons, claim 1 is patentable over the cited art along with its dependent claims. The remaining independent claims include similar limitations to those discussed above and are, therefore, patentable over the cited art for similar reasons along with their dependent claims.

Dependent Claims

In view of the above remarks, a specific discussion of the dependent claims is considered to be unnecessary. Therefore, Applicants' silence regarding any dependent claim is not to be interpreted as agreement with, or acquiescence to, the rejection of such claim or as waiving any argument regarding that claim.

Conclusion


For the foregoing reasons, the present application is believed to be in condition for allowance, and such action is earnestly requested.

If any additional fee is required, please charge Deposit Account No. 02-2666.

Respectfully submitted,
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